



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,070	06/23/2003	Wendell Martens	20920.NP	8602

20551 7590 12/09/2004

THORPE NORTH & WESTERN, LLP.
8180 SOUTH 700 EAST, SUITE 200
P.O. BOX 1219
SANDY, UT 84070

EXAMINER

SAFAVI, MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

3673

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,070

Applicant(s)

MARTENS ET AL.

Examiner

M. Safavi

Art Unit

3673

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 30, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT-Rule-17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/28/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3673

Information Disclosure Statement

The information disclosure statement filed November 28, 2003 fails to fully comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because Applicant has failed to provide a date of publication for the references listed as A4, A5, A6, A7, and A8 under 'Other Prior Art'. It has been placed in the application file, but the information referred to therein, with respect to the references listed as A4, A5, A6, A7, and A8 under 'Other Prior Art', has not been considered as to the merits. See MPEP § 2128, 706.02(a)II, and 609(III)(A)(1). Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

~~A person shall be entitled to a patent unless –~~

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3673

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-8 and 17-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Swanson.

Swanson discloses, Fig. 4 for example, a mattress system having a core layer 116 of latex foam possessing a density of from about 2.0 to about 2.7 lb/ft³ with a thickness of from about 3" to about 7", col. 3, lines 25-29 and col. 4, lines 18-20, (see also, the cited Calderon '094 patent showing evidence of a pincore type latex foam which is of 2.5 to 4-5 lb/ft³ in density). A top layer of viscoelastic foam 114 possessing a density of from about 3.0 to about 4.5 lb/ft³ with a thickness of from about 2" to about 4", col. 2, lines 45-67 and col. 4, lines 14-18, is placed thereabove. A removable cover is utilized, col. 5, lines 4-12. The viscoelastic foam layer 114 of Swanson inherently possesses the characteristic of a layer configured to provide a substantially uniform response over a room temperature range of from about 55° F to about 85° F as well as the viscoelastic response of the layer 114 varying by less than about 15% within a range from

Art Unit: 3673

about 30° F to about 100° F by virtue of the physical properties. Swanson discloses the limitations recited within instant claims 1, 2, 3, 5, and 18. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the Swanson mattress system with a top viscoelastic layer possessing a density of from about 3.0 to about 4.5 lb/ft³ with a thickness of from about 2" to about 4", and a core layer possessing a density of from about 2.0 to about 2.7 lb/ft³ with a thickness of from about 3" to about 7" particularly, when considering the disclosed values and ranges in Swanson, see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990); *In re Geisler*, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997); *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985); and *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). As such, forming Swanson with the claimed characteristics of a substantially uniform response over a room temperature range of from about 55° F to about 85° F as well as the viscoelastic response of the layer 114 varying by less than about 15% within a range from about 30° F to about 100° F would have been an obvious formulation of an optimal range, see *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382; *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969); *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056

Art Unit: 3673

(Fed. Cir. 1990); and In re Geisler, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997).

2. Claims 1-8 and 17-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Landvik et al. '574

Landvik et al. '574 discloses, Figs. 3 and 7, a mattress system having a core layer 5 of polyurethane foam possessing a density of from about 2.0 to about 2.7 lb/ft³ with a thickness of from about 3" to about 7", col. 2, lines 49-51. A top layer of viscoelastic foam 6, or 6/7, possessing a density of from about 3.0 to about 4.5 lb/ft³ with a thickness of from about 2" to about 4", col. 2, lines 52-55 and lines 60-64, is placed thereabove. A removable cover is utilized, col. 3, lines 21-38. The viscoelastic foam layer 6, or 6/7, of Landvik et al. '574 inherently possesses the characteristic of a layer configured to provide a substantially uniform response over a room temperature range of from about 55° F to about 85° F as well as the viscoelastic response of the layer 114 varying by less than about 15% within a range from about 30° F to about 100° F by virtue of the physical properties. Landvik et al. '574 discloses the limitations recited within instant claims 1, 2, 3, 5, and 18. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the Landvik et al. '574 mattress system with a top viscoelastic layer possessing a density of from about 3.0 to about 4.5 lb/ft³ with a thickness of from about 2" to about 4", and a core layer possessing a density of from about 2.0 to about 2.7

Art Unit: 3673

lb/ft³ with a thickness of from about 3" to about 7" particularly, when considering the disclosed values and ranges in Landvik et al. '574, see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990); *In re Geisler*, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997); *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985); and *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). As such, forming Landvik et al. '574 with the claimed characteristics of a substantially uniform response over a room temperature range of from about 55° F to about 85° F as well as the viscoelastic response of the layer 114 varying by less than about 15% within a range from about 30° F to about 100° F would have been an obvious formulation of an optimal range, see *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382; *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969); *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed. Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997).

3. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Swanson as applied to claims 1-8 and 17-19 above, and further in view of
either Loberg et al. or de Gelis et al.

Art Unit: 3673

Loberg et al. discloses, Figs. 1 and 4, a mattress base or support including a perimeter frame 21, a plurality of slats 41, spanning transversely across the perimeter frame and positioned to directly contact a bottom surface of the mattress, including at least seven pairs of adjustable slats (upper 41), each pair being positioned to support specific area of a body disposed atop the mattress, a plurality of stiffener slats, (lower 41), spanning transversely across the perimeter frame, each stiffener slat being disposed beneath a corresponding pair of adjustable slats, and at least one moveable adjuster clip 70 interconnected between each stiffener slat and the corresponding pair of adjustable slats, configured to be selectively moveable across the span of the slats, so as to adjust a relative flexural stiffness of the corresponding pair of adjustable slats.

Fig. 8 discloses support base having independently adjustable longitudinal sides.

de Gelis et al. discloses, Figs. 1 and 3, a mattress base or support 1 including a perimeter frame 6/8/10, a plurality of slats 3, spanning transversely across the perimeter frame and positioned to directly contact a bottom surface of the mattress, including at least seven pairs of adjustable slats 3, each pair being positioned to support specific area of a body disposed atop the mattress, a plurality of stiffener slats 8 spanning transversely across the perimeter frame, each stiffener slat being disposed beneath a corresponding pair of adjustable slats, and at least one moveable adjuster clip 19 interconnected between each stiffener slat and the corresponding pair of adjustable slats, configured to be selectively moveable across the span of the slats, so as to adjust a relative flexural stiffness of the corresponding pair of adjustable slats. Support base

Art Unit: 3673

having independently adjustable longitudinal sides is disclosed at col. 5, lines 50-59.

To have provided the mattress of Swanson, alone or as modified, with a base having the adjustable slat/clip support of Loberg et al. or de Gelis et al., support base having independently adjustable longitudinal sides thus allowing any desired firmness of sleeping surface along an entire body or specific portions thereof including a shoulder region, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Loberg et al. and de Gelis et al.

4. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landvik et al. '574 as applied to claims 1-8 and 17-19 above, and further in view of either Loberg et al. or de Gelis et al.

Loberg et al. discloses, Figs. 1 and 4, a mattress base or support including a perimeter frame 21, a plurality of slats 41, spanning transversely across the perimeter frame and positioned to directly contact a bottom surface of the mattress, including at least seven pairs of adjustable slats (upper 41), each pair being positioned to support specific area of a body disposed atop the mattress, a plurality of stiffener slats, (lower 41), spanning transversely across the perimeter frame, each stiffener slat being disposed beneath a corresponding pair of adjustable slats, and at least one moveable adjuster clip 70 interconnected between each stiffener slat and the corresponding pair of adjustable slats, configured to be selectively moveable across the span of the slats, so as to

Art Unit: 3673

adjust a relative flexural stiffness of the corresponding pair of adjustable slats.

Fig. 8 discloses support base having independently adjustable longitudinal sides.

de Gelis et al. discloses, Figs. 1 and 3, a mattress base or support 1 including a perimeter frame 6/8/10, a plurality of slats 3, spanning transversely across the perimeter frame and positioned to directly contact a bottom surface of the mattress, including at least seven pairs of adjustable slats 3, each pair being positioned to support specific area of a body disposed atop the mattress, a plurality of stiffener slats 8 spanning transversely across the perimeter frame, each stiffener slat being disposed beneath a corresponding pair of adjustable slats, and at least one moveable adjuster clip 19 interconnected between each stiffener slat and the corresponding pair of adjustable slats, configured to be selectively moveable across the span of the slats, so as to adjust a relative flexural stiffness of the corresponding pair of adjustable slats. Support base having independently adjustable longitudinal sides is disclosed at col. 5, lines 50-59.

To have provided the mattress of Landvik et al. '574, alone or as modified, with a base having the adjustable slat/clip support of Loberg et al. or de Gelis et al., including support base having independently adjustable longitudinal sides, thus allowing any desired firmness of sleeping surface along an entire body or specific portions thereof including a shoulder region, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Loberg et al. and de Gelis et al.

Art Unit: 3673

5. Claims 12-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson as applied to claims 1-8 and 17-19 above, and further in view of Frydman.

Frydman discloses, Figs. 1 and 3 for example, a pillow 20 including a body 28 of viscoelastic foam, col. 4, lines 1-6, having a contoured top side including a ridge, and a bottom side with first and second insert pockets 40 and two foam inserts 48, configured to be inserted into the insert pocket "so as to increase the stiffness of the pillow below the ridge", (any insert would accomplish such). A back support ridge, parallel to and above the first insert pocket is at 22 and a side support ridge, parallel to and above the second insert pocket is at 24.

To have provided the Swanson mattress assembly, alone or as modified, with a viscoelastic pillow possessing a foam insert, thus providing any desired pillow to the mattress assembly, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Frydman.

Selecting any specific viscoelastic material for the Frydman pillow portion 28 including a material configured to provide a substantially uniform response over a room temperature range of from about 550 F to about 850 F., thus providing a stable pillow for the mattress assembly, would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made particularly, when considering the disclosure of Swanson, alone or as modified.

Art Unit: 3673

6. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landvik et al. '574 as applied to claims 1-8 and 17-19 above, and further in view of Frydman.

Frydman discloses, Figs.1 and 3 for example, a pillow 20 including a body 28 of viscoelastic foam, col. 4, lines 1-6, having a contoured top side including a ridge, and a bottom side with first and second insert pockets 40 and two foam inserts 48, configured to be inserted into the insert pocket "so as to increase the stiffness of the pillow below the ridge", (any insert would accomplish such). A back support ridge, parallel to and above the first insert pocket is at 22 and a side support ridge, parallel to and above the second insert pocket is at 24.

To have provided the Landvik et al. '574 mattress assembly, alone or as modified, with a viscoelastic pillow possessing a foam insert, thus providing any desired pillow to the mattress assembly, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Frydman. Selecting any specific viscoelastic material for the Frydman pillow portion 28 including a material configured to provide a substantially uniform response over a room temperature range of from about 550 F to about 850 F., thus providing a stable pillow for the mattress assembly, would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made particularly, when considering the disclosure of Landvik et al., alone or as modified.

Art Unit: 3673

7. Claims 12-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson as applied to claims 1-8 and 17-19 above, and further in view of Davis when considering any of Contreras or Johnson et al. or Frydman.

Davis discloses, Figs. 2, 9, 11, and 12 for example, a pillow 10 including a body of foam having a contoured top side including a ridge, and a bottom side with first and second insert pockets and two foam inserts 17a, 17b, configured to be inserted into the insert pocket "so as to increase the stiffness of the pillow below the ridge", (any insert would accomplish such). A back support ridge, parallel to and above the first insert pocket is at 11 and a side support ridge, parallel to and above the second insert pocket is at 12. Any of various cross sectional shaped may be utilized for the inserts, col. 4, lines 30-32 and col. 5, lines 64-67 with the insert encompassing a variety of constant or variable compressibilities, col. 2, lines 1-2.

Each of Contreras, Johnson et al., and Frydman discloses a pillow formed of a viscoelastic material.

To have provided the Swanson mattress assembly, alone or as modified, with a viscoelastic pillow possessing a foam insert, thus providing any desired pillow to the mattress assembly, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Davis when

considering any of Contreras or Johnson et al. or Frydman. Selecting any specific viscoelastic material for the modified Davis pillow 10 including a material configured to provide a substantially uniform response over a room temperature

Art Unit: 3673

range of from about 550 F to about 850 F., thus providing a stable pillow for the mattress assembly, would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made particularly, when considering the disclosure of Swanson, alone or as modified.

8. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landvik et al. '574 as applied to claims 1-8 and 17-19 above, and further in view of Davis when considering any of Contreras or Johnson et al. or Frydman.

Davis discloses, Figs. 2, 9, 11, and 12 for example, a pillow 10 including a body of foam having a contoured top side including a ridge, and a bottom side with first and second insert pockets and two foam inserts 17a, 17b, configured to be inserted into the insert pocket "so as to increase the stiffness of the pillow below the ridge", (any insert would accomplish such). A back support ridge, parallel to and above the first insert pocket is at 11 and a side support ridge, parallel to and above the second insert pocket is at 12. Any of various cross sectional shaped may be utilized for the inserts, col. 4, lines 30-32 and col. 5, lines 64-67 with the insert encompassing a variety of constant or variable compressibilities, col. 2, lines 1-2.

Each of Contreras, Johnson et al., and Frydman discloses a pillow formed of a viscoelastic material.

To have provided the Landvik et al. '574 mattress assembly, alone or as modified, with a viscoelastic pillow possessing a foam insert within a pocket beneath respective ridges, thus providing any desired pillow to the mattress

Art Unit: 3673

assembly, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Davis when considering any of Contreras or Johnson et al. or Frydman. Selecting any specific viscoelastic material for the modified Davis pillow 10 including a material configured to provide a substantially uniform response over a room temperature range of from about 550 F to about 850 F., thus providing a stable pillow for the mattress assembly, would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made particularly, when considering the disclosure of Landvik et al., alone or as modified.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (703) 308-2481. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



**MICHAEL SAFAVI
PRIMARY EXAMINER
ART UNIT 354**

M. Safavi
December 04, 2004